UNIDO

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

REGIONAL CONSULTATION ON THE FISHERIES INDUSTRY FOR ASIA AND THE PACIFIC ISLAND COUNTRIES

Vienna, Austria, 2–6 December 1991

REPORT

Distr.
LIMITED

ID/379
(ID/WG.518/3)
16 January 1992

ENGLISH

PREFACE

The System of Consultations is an instrument through which the United Nations Industrial Development Organization (UNIDO) serves as a forum for developed and developing countries in their contacts and discussions directed towards the industrialization of the latter countries. Participants in the Consultations include government officials, as well as representatives of industry, labour, consumer groups and others, as deemed appropriate by the Government concerned. The System facilitates negotiations among interested parties, at their request, either during or after the Consultation meetings.

Benefits deriving from this activity include the identification of obstacles to industrial development in developing countries; the monitoring of trends in world industry with a view to identifying action-oriented measures for increasing the industrial output of developing countries; and the search for new forms of international industrial cooperation in North-South and South-South relations.

Since the inception of the System 1/ in 1975, Consultations have been held on the following industries and topics: agricultural machinery, building materials, capital goods, fertilizers, fisheries, food processing, industrial financing, iron and steel, leather and leather products, non-ferrous metals, petrochemicals, pharmaceuticals, training of industrial manpower, vegetable oils and fats, and wood and wood products. The System brings together sectoral decision-makers to deliberate on and propose concrete measures to accelerate the process of industrialization in developing countries. It has generated many innovations, particularly with respect to technological alternatives, integrated development and contractual arrangements. The many opportunities thus provided have led to the implementation of projects in technical assistance, investment promotion and technology transfer.

The Consultation process, by virtue of its consensual and normative character, has revealed itself to be an efficient vehicle for balancing cooperation. It is eminently suited to assist member States in the formulation of strategies and policies for industrial development.

The System of Consultations operates under the continuous and close guidance of the Industrial Development Board of UNIDO. In addition to the annual reviews and occasional progress appraisals, the System was subjected to an in-depth evaluation in 1989, which concluded that it was, moreover, providing a major contribution to the development and formulation of UNIDO policies and programmes in specific sectors through integration and interaction with the other main activities of the Organization.

1/ See Report of the Second General Conference of the United Nations Industrial Development Organization (ID/CONF.3/31), chap. IV, "The Lima Declaration and Plan of Action on Industrial Development and Co-operation", para. 66.

CONTENTS

	Paragraphs	Page
PREFACE		1
INTRODUCTION	1-5	4
AGREED CONCLUSIONS AND RECOMMENDATIONS	6-31	5
Chapter		
I. ORGANIZATION OF THE CONSULTATION	32-42	9
II. REPORT OF THE PLENARY SESSIONS	43-51	11
III. REPORT OF THE DISCUSSION ON THE ISSUE: MEASURES TO INCREASE THE PRODUCTION AND MARKETING OF VALUE-ADDED FISH PRODUCTS IN ASIA AND THE PACIFIC ISLAND COUNTRIES	52-86	12

Annexes

I.	List of participants	19
II.	List of documents	25
III.	Subjects on which participating Asian and Pacific island countries indicated that technical assistance was required	26

INTRODUCTION

1. The Regional Consultation on the Fisheries Industry for Asia and the Pacific Island Countries was held at Vienna from 2 to 6 December 1991. The Consultation was attended by 65 participants from 32 countries and three international organizations (see annex I).

Background to the Regional Consultation

2. The Industrial Development Board, at its fourth session in October 1988, decided to include the Regional Consultation on the Fisheries Industry for Asia and the Pacific Island Countries in the programme of Consultation meetings for the biennium 1990-1991. 1/

3. Regional surveys and other basic documents on the situation of the fisheries industry in the region were prepared by the UNIDO Secretariat and international experts. In addition, national case-studies were undertaken by experts from the region.

4. The Secretariat convened an expert group meeting for the Asian region in Singapore from 14 to 17 May 1991. The meeting was organized by UNIDO in cooperation with the Economic and Social Commission for Asia and the Pacific (ESCAP) and Technonet Asia, and was attended by 10 participants from six Asian countries. 2/

5. Taking note of the complexity and wide spectrum of problems facing the fisheries industry in the region, and based on their findings, the experts concluded that the issue of measures to increase the production and marketing of value-added fish products in Asia and the Pacific island countries was of particular importance to the development of the sector and should be addressed by the Consultation. They considered that the issue should take into account the following aspects:

(a) Availability and types of raw material;

(b) Processing technologies for value-added products;

(c) Financing mechanisms to foster technological growth;

(d) Training programmes and research efforts aimed at the development of value-added processing capabilities;

(e) Knowledge of markets and the prerequisites to penetrate them.

1/ Report of the Industrial Development Board on the work of its fourth session (GC.3/2), annex I, IDB.4/Dec.8.

2/ Report: Expert Group Meeting on the Fisheries Industry for Asia and the Pacific Island Countries, Singapore, 14-17 May 1991 (ID/WG.512/3(SPEC.)).

AGREED CONCLUSIONS AND RECOMMENDATIONS

Preamble

6. The Regional Consultation, conscious of the central role played by the fisheries industry in the socio-economic development of Asia and the Pacific island countries in providing protein for human consumption and as an earner of foreign exchange, considers it essential for the implementation of programmes and projects related to increasing the production and marketing of value-added fish products to assign particular importance to the following points:

(a) Fisheries product development programmes for Asia and the Pacific island countries should be integrated into their national development efforts;

(b) Individual enterprises should only be created after their technical, economic and commercial viability has been established. Due consideration should also be given to environmental and social aspects;

(c) National Governments should adopt and implement policies to support fisheries management, fish processing and marketing. They should also introduce fiscal incentives to facilitate product development and exports. They should abolish measures of an anti-trade nature adopted in a unilateral manner, particularly through embargoes.

Conclusions

Government policies

7. Government policy plays an important part in the production and marketing of value-added fish products. This is recognized in the following areas:

(a) Support for the organization of the sector and the development of an active role for socio-professional bodies, particularly in the identification of needs, selection and introduction of appropriate equipment, and training;

(b) Incentives for value-added fish processing, better utilization of by-catch* and reduction of waste;

(c) Promotion and development of infrastructures related to fisheries;

(d) Provision of favourable tariffs with a view to allowing the acquisition of essential inputs;

(e) Provision of appropriate training and research facilities;

(f) Provision of information regarding markets, standards and export opportunities.

*By-catch: Other species of fish etc. that are caught with the desired catch and that cannot be, or are not, processed into food for humans.

Raw material

8. Future increases in the supply of raw material for the fish processing industry are more likely to come from the culture or farming of fish than from the capture industry, as wild resources are now under severe pressure.

9. A large increase in the supply of captured fish can come by utilization of the by-catch from fishing operations, particularly from trawling. This by-catch is composed of a large variety of species that cannot be processed uniformly.

10. Utilization of by-catch will require solutions that are technologically and economically viable. They will vary from country to country but may include some form of bulk freezing of fish on freezer/collector vessels or, possibly, its reduction to fish silage on catching, or the use of collector vessels equipped with fish mincers and acid-circulating tanks. Shrimp trawlers must also be encouraged to preserve and to bring back as much of the by-catch as possible through appropriate incentives. These considerable amounts of by-catch should not, however, be allowed to upset local markets.

11. In order to increase the supply of raw material through better conservation of the captured products, the availability of simple techniques suitable for small units, and of appropriate equipment at the different stages in the process of transport and distribution, should be supported.

Aquaculture

12. Aquaculture is seen as the most important growth area in the provision of raw material for the fishing industry in selected countries of the Asia and Pacific island region.

Technology transfer

13. Technology for the fish processing sector needs to be appropriate to local conditions. However, the level of technology must be adequate to allow processors to meet national and international quality standards and to contribute to the protection of the environment. Technology that has proved to be appropriate in some countries of the region should be transferred to the others by means of joint ventures or other bilateral arrangements.

Training

14. Both short- and long-term training are urgently required at all levels in order to provide the fisheries industry with skilled personnel for technical and managerial positions.

Financing

15. The perceived high risk nature of the fisheries industry has imposed difficulties on the obtaining of financial resources for both capital investment and working capital. However, the development of value-added products is seen as a viable activity that can attract financial support.

Markets and marketing

16. The fish and fish-product trade has to comply mainly with various regulations on quality control, health and hygiene. In addition, fish exports come

up against other non-tariff obstacles arising from the desire to protect the environment. These are becoming more strict and far-reaching in the three main international fish market regions: North America, Europe and Japan. The industry also has a need for an efficient marketing information system.

International cooperation (North-South)

17. Training and research centres, socio-professional bodies, foreign companies and international organizations can provide useful expertise and help developing country producers to manage their resources, to develop raw materials, to assess appropriate techniques, to provide and strengthen learning and training systems, to gain access to export markets, or to increase value-added work. Joint-venture agreements can still be appropriate but may take different forms. Cooperation may include providing training and facilitating access to finance in the form of foreign exchange.

Regional cooperation (South-South)

18. Considerable regional cooperation may be possible in the areas of aquaculture, product development and training, particularly as technologies and systems are likely to be more appropriate within the region.

Recommendations

Training

19. More resources should be allocated by Governments and aid donors to staff training, including small entrepreneurs; to the supply of books and teaching materials; and to laboratory and audio-visual equipment. A stronger link should be developed with industry.

20. Regional cooperation should be encouraged. A regional approach to fish industry training and human resource development for the value-added subsector would help greatly to improve and standardize training courses and qualifications in the area.

Government policies

21. Where necessary for development and the reduction of waste, Governments should encourage and promote activities such as the collection and utilization of by-catch, as well as value-added fish processing.

Financing

22. Financial institutions should reconsider their traditional position regarding the fisheries industry. They should improve and coordinate efforts to provide efficient services to support the financing of the fisheries industry, particularly the development of systems for value-added products. These services should include efficient export credit guarantee schemes, insurance facilities, investment capital, working capital and bank guarantees.

Marketing

23. To meet the demand of international markets for high quality products, new forms of international industrial cooperation that would enable a balanced development of the production sectors concerned should be promoted. Technical

assistance should also be provided in areas such as training, packaging development, information dissemination and quality management. With regard to domestic markets, the industry should make greater efforts to improve distribution in order to reach remote areas with appropriate products.

International and regional cooperation

(a) North-South cooperation

24. Companies or donor countries should make the effort required to promote and strengthen quality control systems in fish factories in the region, providing expertise, training and advice.

25. Foreign partners or suppliers of technology should pay serious attention to the appropriateness of the technologies transferred, to their impact on the environment and to the training of local personnel in operations and maintenance.

(b) South-South cooperation

26. Regional cooperation and joint ventures between countries in the region should be further encouraged through Governments and the business community. UNIDO, the Food and Agriculture Organization of the United Nations (FAO) and other international agencies concerned should assist the process. Areas such as aquaculture, product development, marine resources, management, exchange of information and training should be considered for such cooperation.

(c) Multilateral cooperation

27. UNIDO should mobilize financial resources to provide technical assistance for the fisheries industry in the region.

28. The United Nations Educational, Scientific and Cultural Organization (UNESCO), the World Bank, UNIDO and the Asian Development Bank (AsDB) should support measures to improve and standardize fisheries training, as requested by the Asian Fisheries Society (AFS) and fishery universities in the region.

29. The international organizations concerned should strengthen their efforts to provide information on fish marketing studies to developing countries and should assist them in their attempts to improve their marketing of exports.

30. UNIDO should organize, in 1992, in cooperation with competent organizations in the area of standardization, a workshop on the prevailing standards in the European Economic Community (EEC), Japan, and the North American markets. The workshop should suggest ways of conforming to the standards of those markets.

31. Countries that play an important role in the fisheries industry should participate in future Consultation meetings.

I. ORGANIZATION OF THE CONSULTATION

Opening of the Consultation

Statement on behalf of the Director-General

32. In his opening statement, on behalf of the Director-General of UNIDO, the Deputy Director-General, Department of External Relations, Public Information, Language and Documentation Services, said, after giving a brief analysis of the present development of the fisheries industries in the Asia and Pacific region, that it was essential to find ways and means of creating favourable conditions to improve productivity and of reducing the gap between the supply and demand for fish. He noted that the demand for fish had been growing continuously all over the world. Projections indicated that by the year 2000, a 40 per cent increase would have to be met, as the world population would then have reached 6.5 billion. The Deputy Director-General emphasized that the fisheries in Asia and the Pacific were largely small-scale or artisanal as several Asian countries had retained most of their traditional fishing activities. He identified poor handling practices, inefficient marketing, lack of capital and poor infrastructure as some of the main reasons for the low supply of fish products. Urgent measures, such as better use of the catch, reduction of post-catch losses and encouraging economic exploitation of unconventional species, had to be adopted without delay. He pointed out that an increase in fish supplies and value-added local production could be obtained through efficient management, including marketing, and improved post-harvest technology and fish preservative techniques.

Statement by the Director of the System of Consultations Division

33. "A consultation meeting is not a seminar nor a workshop but rather a forum." With this introductory remark, the Director of the System of Consultations proceeded to explain that a Consultation was a meeting where specialists from the sector and related subsectors and branches gathered to discuss problems and constraints faced by the sector and formulated policy recommendations to solve the problems identified.

34. He observed that although the Consultation on the fisheries industry concerned the Asia and Pacific region, it also included participants from other regions such as Africa, Europe and Latin America. He defined the objectives of the Consultation, which were: (a) to exchange views and experiences; (b) to identify policy measures aimed at increasing productivity, reducing losses, releasing financing, and protecting the environment; (c) to identify joint-venture opportunities for creating new enterprises or for rehabilitating existing ones; and (d) to identify the technical assistance required by enterprises in the subsector.

35. The Director concluded by stating that the deliberations should focus on clear, concise and operational recommendations.

Presentation of UNIDO activities related to fisheries

36. A representative of the Secretariat described the work of the Programme Development Support Unit, Special Measures and Activities Division, Department for Programme and Project Development, to the participants and its relation to fisheries. He said that a typology in order to identify patterns of sectoral development was being designed for the fisheries industrial system in Africa.

A number of applications to the fisheries industries in Ghana, Guinea, Namibia and Senegal were mentioned.

37. Another representative of the Secretariat described briefly the activities of the Agro-based Industries Branch, Industrial Operations Technology Division, Department of Industrial Operations. He concluded his presentation by giving some examples of completed and ongoing technical assistance projects related to fish processing in the Pacific region.

38. A representative of the Secretariat briefed the participants on the industrial investment promotion programme. He also informed participants about the Investment Promotion Information System, which enabled UNIDO to contact potential foreign partners for investment projects.

Election of officers

39. The following officers were elected:

Chairman: Gan Kian Tee (Malaysia), Chief Executive Officer, Sabah Fish Marketing Sdn. Bhd. (SAFMA)

Rapporteur: Md. Kamal (Bangladesh), Associate Professor, Department of Fisheries Technology, Bangladesh Agricultural University, Mymensingh

Vice-Chairmen: María del Mar Sáez Torres (Spain), Jefa de Sección de Inspección de Producción Pesquera, Dirección Gral. de Mercados Pesqueros, Secretaría General de Pesca Marítima

Liang Lin (China), Deputy Chief, Division of Foreign Economics and Techniques, Bureau of Aquatic Products, Ministry of Agriculture

Adoption of the agenda

40. The Consultation adopted the following agenda:

1. Opening of the Consultation
2. Election of Chairman, Vice-Chairmen and Rapporteur
3. Adoption of the agenda and organization of work
4. Presentation of the issue by the UNIDO Secretariat
5. Discussion of the issue
6. Conclusions and recommendations
7. Adoption of the report of the Consultation

Documentation

41. The documents issued prior to the Consultation are listed in annex II.

Adoption of the report

42. The report of the Regional Consultation on the Fisheries Industry for Asia and the Pacific Island Countries was adopted by consensus at the final plenary on 5 December 1991. On 6 December, the participants were given the opportunity of having meetings with UNIDO staff members and discussing possibilities for future cooperation.

II. REPORT OF THE PLENARY SESSIONS

Presentation of the issue

Measures to increase the production and marketing of value-added fish products in Asia and the Pacific island countries

43. The presentation of the issue was preceded by the introduction of the main background paper entitled "Fish industry development patterns in Asia and the Pacific" (ID/WG.518/1) by a member of the Secretariat. He briefly highlighted the problems related to technology transfer, and the marketing and distribution of fish product exports. Another member of the Secretariat presented the issue of the Consultation: "Measures to increase the production and marketing of value-added fish products in Asia and the Pacific island countries". He focused on the importance of:

(a) The availability of raw material for value-added fish processing of unutilized species;

(b) The processing and marketing of fish products.

44. He suggested using a few, rather than many, species of commercially important fish owing to the advantage that less machinery was required. He then discussed: the factors that would help to make finished quality products more profitable; the export of high-value fish; and the production of value-added food from low-value species of fish. He mentioned the need for opportunity identification and better management in the fisheries industry.

Summary of discussion

45. A participant pointed out the need for consensus on the diagnosis of problems related to the fisheries industry, with a view to proposing an adequate economic policy. The need for the integrated development of the subsector was also stressed, with emphasis being placed on effective planning, and on research to assess the low-cost value-added products from unutilized fish species.

46. A number of participants cited briefly the potential for international cooperation that existed in some developed countries with respect to technology transfer, planning and management capabilities, engineering services and consultancy, industrial maintenance and technical skills training, which could be put at the disposal of the developing countries for the expansion of the industry.

47. Some participants, particularly from developing countries, introduced papers dealing with the current situation, problems and prospects with a view to seeking assistance for the modernization, rehabilitation and development of their fisheries industry.

48. A number of participants proposed that joint ventures be set up in the fisheries industry between developed and developing countries thereby affording access to the markets of developed countries, provided the quality and types of products met the standards required by the importers. It was emphasized that in order to achieve better quality products, personnel should be trained in the use and maintenance of equipment.

49. Many participants underlined the need for advanced technology to utilize by-catch for human food as a source of animal protein. One participant expressed the success of fish-meal, which used by-catch as a source of food for aquaculture. Another participant indicated that silage could be made from by-catch for the use of poultry and aquaculture.

50. Some participants observed, however, from their long experience in the fisheries industry that silage prepared from by-catch could not be cost-effective and was difficult to control.

51. The view was voiced that the use of selective gear by shrimp trawlers together with the introduction of a quota system to avoid indiscriminate killing of fish could be a good management tool. Some participants expressed the fear that the latter practice was not fully efficient. Rather, it would be desirable that frequent inspections were made to ensure that shrimp trawlers were using selective gear.

III. REPORT OF THE DISCUSSION ON THE ISSUE: MEASURES TO INCREASE THE PRODUCTION AND MARKETING OF VALUE-ADDED FISH PRODUCTS IN ASIA AND THE PACIFIC ISLAND COUNTRIES

52. Several participants noted the possibility of collecting by-catch on factory vessels with processing facilities. When landed, by-catch could be processed into fish-meal. This possibility was particularly suited to countries with a large agricultural sector. For countries with a large population and limited fishing resources, however, the utilization of by-catch for human consumption was a priority need. In both cases, by-catch preservation and landing should be encouraged through appropriate incentives.

53. Because of their remote location, small island countries could encounter problems even in obtaining the necessary by-catch from other countries for transformation into fish-meal for aquaculture. Measures for economic cooperation between developing countries and barter arrangements could be formulated in this respect.

54. Intermediate technologies, such as the processing of fish silage and the transformation of the catch into surimi-based* products as well as bulk freezing, were mentioned by some participants as suitable solutions for the utilization of by-catch.

55. A participant stressed the importance of aquaculture in his country as it represented the second largest export-earning sector. Urgent assistance was therefore required in order to acquire technology suitable for fish culture, as well as to improve the marketing and distribution of the products therefrom.

56. Another participant stated that as fish represented the main source of protein for the domestic market, it was of the utmost importance to support the fisheries sector. Production should be differentiated so that not only export-oriented fish products such as tuna and mackerel were processed, but also species like sardines, which were more suitable to domestic demand.

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*Surimi is a semi-processed intermediate product.

57. The value-added processing of fish from fish culture presented several advantages in terms of the selected number and type of species that could be processed to meet the specific demands of the market. In view of the limited number of species requiring a limited number of machines, the economic advantages were greater than with the processing of marine species.

58. Post-catch losses, wastage of fish during handling at sea and processing were regarded as a loss of raw material and therefore of a potential source of protein for the domestic market and of foreign currency from exports.

59. There was a linkage between the availability of raw material and government policies. The latter directly influenced the utilization of by-catch, by allowing shrimp trawling practices that destroyed large amounts of fish that often could not be recuperated for lack of on-board preservation facilites or for other economic reasons, and by establishing quota systems that resulted in the destruction of fish.

60. Most participants agreed that government policies could foster the utilization of by-catch by subsidizing low-value fish processing through a levy on high-value fish processing.

61. An example of export policy in an Asian country was cited, which aimed at promoting exports by providing quality assurance services to exporters and fostering cooperation with the importing authorities of target markets to increase confidence in the products.

62. Participants stressed the active role that Governments should play in supporting fisheries ministries through the encouragement and setting up of socio-professional as well as physical infrastructure, including training and research facilities, market information networks and quality control laboratories.

63. With regard to technology and its transfer, most participants emphasized the importance of differentiating between technologies oriented towards domestic markets and those towards export markets. In the case of domestic orientation, the technology could be simple and transferred in single components, while in the case of export orientation an integrated package was necessary, including financing, training and management.

64. Value-added technology was sometimes developed in developing countries and was therefore best suited to local products and local consumer preferences. Products such as spring rolls, cooked and peeled shrimp, cleaned cephalopods and imitation crabmeat were widely produced in the Asian region. Those countries that had developed the relevant technology could cooperate with others in need, on the basis of mutually beneficial arrangements.

65. Training and research were closely linked to the development and transfer of technology. Specialized training focusing on particular subsectors, but connected with all areas, and technical and continuous training linking theory to practice, were discussed as a means of contributing to the development of national technological capabilities.

66. Participants agreed that three areas of training needed more improvement:

(a) Development of adequate skills to cater to the industry's requirements;

(b) Training in the operation, maintenance and repair of equipment to be learned directly from the equipment producers;

(c) Training of small entrepreneurs in management and accounting.

67. A participant stressed that training in technology should be provided at national centres so as to take into consideration local conditions. Where those centres did not exist, they should be created with the support of international organizations.

68. It was pointed out that the two main types of financing needed, namely, capital and cash-flow financing, could be sought from different sources. The main partners, however, were international, national and commercial banks as well as institutions offering export insurance schemes.

69. As an example, a participant from the Asian region said that his country provided strong financial support to value-added-oriented industry at two levels:

(a) At the export level, through tax exemptions on imported equipment;

(b) At the local level, through the provision of tools, training, and housing facilities for rural development.

70. In some industrialized countries, the type of financial support could be more limited and granted only when new technology was utilized, so as to limit the risk of the processors.

71. The international organizations that were present at the Consultation and that were financing or assisting their member States in the identification of financing sources introduced their activities to the participants. The representative of the World Bank stressed that bankable projects always found a source of financing. He referred to the affiliated organizations of the World Bank; i.e., the International Development Association and the International Finance Corporation, which also supported operations aimed at the value-added processing industry in the fisheries sector.

72. The representative of the Commonwealth Secretariat explained that his organization offered technical assistance and funding for training, involving non-member countries also.

73. The representative of the African, Caribbean and Pacific Group of States (ACP Group) specified that financing was not a direct activity of her organization, which operated in that area through affiliate institutions such as the Centre for the Development of Industry, and the Technical Centre for Agricultural and Rural Cooperation. Joint ventures were promoted particularly between the ACP Group and EEC countries.

74. A participant from a least developed country illustrated several possibilities available in his country for financing rural development and stressed that social financing had helped in the development of the fisheries sector, particularly the fact that women working in aquaculture in rural areas had received financial support from national banks.

75. The representative of a large continental Asian country pointed out that in his country two sources were available for value-added fish processing:

(a) the national bank; and (b) foreign loans, the latter being mainly utilized for long-term projects and training programmes.

76. Participants from developing countries stressed that in view of the European Single Market in 1993 requiring not only a specific level of quality in finished products, but also specific manufacturing conditions, restructuring would be needed in their industries to adjust to those higher requirements. Concern was voiced as to the sources of financing for the restructuring operations.

77. With regard to marketing, several participants expressed concern over the limited, often outdated information made available by importing countries on their market requirements. Few organizations, and only in Europe, provided information and training on market regulations, packaging, and standards specifically addressed to developing countries seeking market access. International organizations, however, could be of limited assistance as individual, active and direct contacts were necessary between exporters and importers through appropriate marketing channels.

78. Some participants stressed that marketing was a problem, not only for export but also for domestic markets. Being one of the main factors behind effective domestic marketing, quality control should be improved so as to cover the whole chain of operations and lead to quality management. If quality control was not improved, the final product was affected and a lower level of consumption resulted in the domestic market.

79. Quality control was singled out by several participants as a most important tool to meet the import standards of markets such as Europe and the United States of America. Closer cooperation, oriented towards increasing the quality of products and overcoming non-tariff barriers, was essential between importers and exporters. Industrialized countries, representing the strongest import markets, should be active in developing countries to assist them in achieving mutually beneficial export goals. Proper handling on board ship, including refrigeration, and transportation, were the first parts of the quality control chain and should therefore be improved.

80. Several Asian countries acknowledged that they were not familiar with European markets but depended on Japan as the largest importer in the region. It was pointed out that information on foreign markets should be actively sought through all available channels, including diplomatic and commercial missions. The three main levels at which the addition of value was sought through marketing were as follows:

(a) That of individual enterprises concerned about selling their products for direct, immediate profit;

(b) That of trade associations or groups concerned about promoting the profitability of their member enterprises through the provision of up-to-date information on market access, fairs, conferences, as well as packaging requirements, advertising and regulations;

(c) That of the Government, whereby often not enough resources for marketing were allocated for the value-added fish processing industry.

81. A number of participants mentioned the need for joint ventures as an effective instrument to ensure that the products exported met the requirements

of the markets. It was in the interest of importers operating with partners in developing countries to ensure that the products from those countries found market access and were of standard quality. EEC was relaunching a programme of joint ventures in the fisheries industry.

82. Participants commented widely on the approach developed by the Secretariat in its document entitled "Fish industry development patterns in Asia and the Pacific". They agreed that the countries of the region belonging to the four major groups A, B, C and D identified in the document (ID/WG.518/1, p. 8) and linked by a number of commonalities should approach potential donor countries on a group or cluster basis. Accordingly, an informal session was organized during the Consultation for developed countries and Asian and Pacific countries to meet and to develop, according to their own requirements, technical assistance programmes and projects in which UNIDO could play a significant role.

83. Donor countries expressed their readiness to assist in areas such as by-catch utilization, through the provision of factory ships on a joint venture or rental basis, and training in the fields of quality control and management, as well as the development of acquaculture.

84. All participating countries and international organizations agreed on the urgent need to provide information and training on the new EEC regulations on a timely and regular basis through seminars and meetings of technical nature.

85. Representatives of countries in groups A, B, C and D of the background paper focused their requests on the major areas listed in annex III to the present report. They also agreed upon the following considerations and suggestions:

(a) Developing countries exporting fish and fish products to overseas markets must be informed of the importers' requirements for those markets in terms of quality, standards and sanitary regulations. The provision of information should come from the importers themselves and the international and regional organizations dealing with industry and trade;

(b) It was in the interest of both importers and exporters that the necessary information reached the producer in a timely way so as to orient production from the initial stage up to that of final marketing operations;

(c) When countries were encouraged by Governments and international organizations to produce more value-added products, parallel information should be provided and training programmes offered to facilitate market access.

86. Three proposals for meetings similar to the present Consultation were made to the Secretariat of UNIDO, namely:

(a) A proposal submitted by the delegation of the Libyan Arab Jamahiriya for a regional consultation meeting on the fisheries industry in Africa. Specific areas to be covered at the meeting were also indicated as follows:

Utilization of resources
Processing
Research and training
Aquaculture development
Marketing
North-South cooperation

(b) A proposal submitted by the representative of Fiji for a subregional workshop on promotion of post-harvest technologies in the region. The workshop should be organized by UNIDO in cooperation with the Commonwealth Secretariat and the ACP Group during the 1992-1993 biennium;

(c) A proposal made by the representative of Saint Lucia for a subregional Consultation meeting to discuss the problems of the fisheries industry in the Caribbean region and to draw up recommendations for its further development towards value-added production.

Annex I

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Annex II

LIST OF DOCUMENTS

Issue paper

Measures to increase the production and marketing of value-added fish products in Asia and the Pacific island countries	ID/WG.518/2

Background documents

Fishery industry profiles	ID/WG.512/1(SPEC.)
High value-added processed fish	ID/WG.512/2(SPEC.)
Fish industry development patterns in Asia and the Pacific	ID/WG.518/1

Information document

Report: Expert Group Meeting on the Fisheries Industry for Asia and the Pacific Island Countries, Singapore, 14-17 May 1991	ID/WG.512/3(SPEC.)

Annex III

SUBJECTS ON WHICH PARTICIPATING ASIAN AND PACIFIC ISLAND COUNTRIES INDICATED THAT TECHNICAL ASSISTANCE WAS REQUIRED

Group A

Bangladesh:	By-catch procurement and processing, using factory ships Shrimp aquaculture, processing and marketing Training in value-added processing Quality control (and laboratory facilities)
China:	Quota system marine fisheries management (study tours) Fresh water aquaculture for shrimp/fin fish/salmon On-the-job training (in the country) Joint ventures for the production of fish-meal
Philippines:	Training linked with projects Infrastructure for quality assurance and management EEC standards for marketing of fish products Cold storage facilities (investment)
Viet Nam:	Improvement of infrastructure for: (a) Landing places (b) Production units (c) Canning (d) Training in quality control management

Group B

Saudi Arabia:	Aquaculture (shrimp farming)
Yemen:	Assistance in improving tuna catch Storage for catch in intensive seasons Canning facilities

Group C

Malaysia:	Value-added production of frozen tuna Batter mix for fish fillets Information and training on new EEC regulations
Thailand:	Market surveys and information Standardized system of inspection programmes Technology for transformation of by-catch into fish powder Processing of frozen shrimps and cephalopods

Group D

Fiji:	Offshore fisheries (tuna), high sea vessels Onshore facilities for preservation of catch (storage (ice plants), curing units) Fish processing oriented towards the tourist industry

Maldives:

Training in: handling, processing, quality control, management and marketing

On-the-job training in: yield enhancement techniques, refrigeration, quality control, production supervision and maintenance

Study on the impact of 1993 EEC regulations on the fish processing industry of small island countries

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Printed in Austria
V.92-50267—March 1992—1,950

ID/379
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